

5 **MULTI-LAYER ENGINE USING GENERIC CONTROLS**
FOR OPTIMAL ROUTING SCHEME

ABSTRACT OF THE INVENTION

10 A scheduling engine for optimally scheduling the
allocation of a set of service providers to a defined
set of service points includes a service point
mechanism for collecting and processing a plurality of
service point data elements, and a service provider
mechanism for collecting and processing a plurality of
service provider data elements. A generic multi-layer
15 scheduling mechanism generates allocation schedules for
allocating the set of service providers to the set of
service points irrespective of nonlinearity or
dependence amongst said plurality of service point data
elements and said plurality of service providers data
20 elements. The generic multi-layer scheduling mechanism
employs a heuristic algorithm for use of an objective
function relating to said plurality of service point
data elements and said plurality of provider data
elements and said control parameters that describe what
25 is important to the customer and generating therefrom
an optimal allocation schedule.